

264-1166

05/17/2013

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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, DC 20460

OFFICE OF
CHEMICAL SAFETY AND
POLLUTION PREVENTION

MAY 17 2013

Jamin Huang
Senior Regulatory Manager
Bayer CropScience
P.O. Box 12014
Research Triangle Park, NC 27709

Subject: Revised label – changed company name and product number
Product Name: Cyclanilide 18% SC
EPA Reg. No.: 264-1166
Your submission: Notification dated April 22, 2013
OPP Decision Number: 478346

Dear Dr. Huang:

The Agency is in receipt of your Application for Pesticide Notification under Pesticide Registration Notice (PRN) 98-10. The Registration Division (RD) has conducted a review of this request for its applicability under PRN 98-10 and finds that the action(s) requested fall within the scope of PRN 98-10.

The label submitted with the application has been stamped "Notification" and will be placed in our records.

If you have any questions, please contact Robert Westin by phone at (703) 305-5721 or via email at westin.robert@epa.gov.

Sincerely,

A handwritten signature in black ink, appearing to read "Driss Benmhend".

Driss Benmhend
Acting Product Manager (20)
Fungicide Branch
Registration Division (7504P)

Please read instructions on reverse before completing form.

Form Approved. OMB No. 2070-0060, Approval expires 2-28-95



United States
Environmental Protection Agency
Washington, DC 20460

<input type="checkbox"/>	Registration
<input type="checkbox"/>	Amendment
<input checked="" type="checkbox"/>	Other

OPP Identifier Number

Application for Pesticide - Section I

1. Company/Product Number 264-1166	2. EPA Product Manager Tony Kish	3. Proposed Classification <input type="checkbox"/> None <input type="checkbox"/> Restricted
4. Company/Product (Name) Cyclanilide 18 SC	PM# Team 22	
5. Name and Address of Applicant (Include ZIP Code) Bayer CropScience P.O. Box 12014, 2 T.W. Alexander Drive Research Triangle Park, NC 27709 <input type="checkbox"/> Check if this is a new address	6. Expedited Review. In accordance with FIFRA Section 3(c)(3) (b)(i), my product is similar or identical in composition and labeling to: EPA Reg. No. _____ Product Name _____	

Section - II

<input type="checkbox"/> Amendment - Explain below.	<input type="checkbox"/> Final printed labels in response to Agency letter dated _____
<input type="checkbox"/> Resubmission in response to Agency letter dated _____	<input type="checkbox"/> "Me Too" Application.
<input checked="" type="checkbox"/> Notification - Explain below.	<input type="checkbox"/> Other - Explain below.

Explanation: Use additional page(s) if necessary. (For section I and Section II.)

Notification per PR Notice 98-10, see cover letter for details

CONTACT: Jamin Huang, jamin.huang@bayer.com

Section - III

1. Material This Product Will Be Packaged In:				2. Type of Container	
Child-Resistant Packaging <input type="checkbox"/> Yes <input type="checkbox"/> No	Unit Packaging <input type="checkbox"/> Yes <input type="checkbox"/> No	Water Soluble Packaging <input type="checkbox"/> Yes <input type="checkbox"/> No		<input type="checkbox"/> Metal	<input type="checkbox"/> Plastic
* Certification must be submitted		If "Yes" Unit Packaging wgt.	No. per container	If "Yes" Package wgt	No. per container
3. Location of Net Contents Information <input type="checkbox"/> Label <input type="checkbox"/> Container		4. Size(s) Retail Container		5. Location of Label Directions	
6. Manner in Which Label is Affixed to Product <input type="checkbox"/> Lithograph <input type="checkbox"/> Paper glued <input type="checkbox"/> Stenciled				<input type="checkbox"/> Other _____	

Section - IV

1. Contact Point (Complete items directly below for identification of individual to be contacted, if necessary, to process this application.)		
Name Jamin Huang	Title Senior Regulatory Manager	Telephone No. (Include Area Code) (919) 549-2634
Certification I certify that the statements I have made on this form and all attachments thereto are true, accurate and complete. I acknowledge that any knowingly false or misleading statement may be punishable by fine or imprisonment or both under applicable law.		6. Date Application Received (Stamped)
2. Signature 	3. Title Senior Regulatory Manager	
4. Typed Name Jamin Huang	5. Date April 22, 2013	

Cyclanilide Rate Chart				
Final Concentration PPM	Amount Cyclanilide per volume of water			
	1 gallon Water	50 gallons Water	100 gallons Water	100 gallons Water
1	.02 ml	1 ml	2 ml	.07 fl oz
5	.1 ml	5 ml	10 ml	.34 fl oz
10	.2 ml	10 ml	20 ml	.68 fl oz
20	.4 ml	20 ml	40 ml	1.35 fl oz
50	1 ml	50 ml	100 ml	3.38 fl oz
100	2 ml	100 ml	200 ml	6.76 fl oz
200	4 ml	200 ml	400 ml	13.53 fl oz
500	10 ml	500 ml	1000 ml	33.83 fl oz
1000	20 ml	1000 ml	2000 ml	67.65 fl oz

Do not tank mix Cyclanilide SC with pesticides or liquid fertilizers containing micronutrients.
Use Restrictions

- Do not apply more than 0.34 lb ai/A per crop per year
- Do not apply more than 3 applications per crop per year

FOR USE AS A COTTON PLANT GROWTH REGULATOR

USE INFORMATION

Cyclanilide 18% SC in a 1:4 ratio with the active ingredient mepiquat chloride modifies plant growth to reduce plant height resulting in a more manageable cotton crop. Additional benefits include: earliness, increased fruit retention, less boll rot, better light interception of lower leaves, improved defoliation and harvest efficiency.

APPLICATION INSTRUCTIONS

Cyclanilide 18% SC must be tank mixed with the active ingredient mepiquat chloride. The table below provides an example of the ratios required to provide plant growth regulation in cotton. Sequential applications can be made, with a minimum of 7 days between applications. (See Timing and Application Rate Table). Cyclanilide 18% SC in combination with the active ingredient mepiquat chloride can be tank mixed with insecticides, miticides and foliar fertilizer. (See Mixing Instructions).

Prior to application(s) the field should be carefully scouted for stress from factors including: weather, nematode, mite or insect damage, disease stress, herbicide injury or fertility stress. Application(s) should not be made to cotton under stress.

- For ground application use a minimum of 10 gallons of water per acre using nozzles that will develop a Medium spray category as defined by ASAE S-572. Typical nozzles include hollow cone, flat fans, extended range flat fans, and Turbo Teejet.
- For aerial equipment apply in a minimum of 2 gallons of water per acre.

APPLICATION TIMING AND RATES

Begin applications at matchhead square (first square of a typical cotton plant is 1/8 to 1/4 inch in diameter.) First application should be applied when 50% of the cotton plants have one or more matchhead squares. Begin sequential applications 7-14 days later, or when regrowth occurs. Allow a minimum of 7 days between applications. Use rates are based on field examination and the degree of vegetative vigor. (See Timing And Application Rate Table For Cotton Plant Growth Regulator Table)

For sequential applications following a matchhead square treatment or for applications initiated after matchhead square, use 0.23 fl oz to 0.34 fl oz per acre Cyclanilide 18% SC plus the appropriate volume of mepiquat chloride as needed based on field examination and degree of vegetative vigor. (See Timing And Application Rate Table For Cotton Plant Growth Regulator Table)

CYCLANILIDE 18% SC TIMING AND APPLICATION RATE TABLE FOR COTTON PLANT GROWTH REGULATOR

	Fl oz Cyclanilide 18% SC/ A	Fl oz of 0.35 lb / gal formation of Mepiquat chloride /A
Application beginning at the matchhead square growth stage and sequential applications or applications beginning after matchhead square growth stage	0.23	4.2
	0.34	6.3
For High Management Situations*	0.57	10.5

*High management situations are defined as situations where any one of the following conditions may occur: aggressive watering, aggressive fertilization or aggressive varieties.

Allow a minimum of 7 days between applications.
Do not exceed 2.53 fl oz per acre per year.

LATE SEASON APPLICATIONS

Applications of Cyclanilide 18% SC plus the appropriate volume of mepiquat chloride can help manage certain late season crop situations such as fields that don't cut out completely, fields where cotton continues to grow after cut-out and other similar situations. Late season applications alone are not a substitute for appropriate early season crop management and should not replace early season usage of Cyclanilide 18% SC plus the appropriate volume of mepiquat chloride. Very rank fields with vigorous regrowth due to poor boll load and optimum growing conditions may not fully respond to a late season application at the maximum suggested use rate.

Late season applications of Cyclanilide 18% SC plus the appropriate volume of mepiquat chloride may provide better response on fields that have also received early season applications of Cyclanilide 18% SC plus the appropriate volume of mepiquat chloride.

Apply up to 0.91 fl oz of Cyclanilide 18% SC per acre plus the appropriate volume of mepiquat chloride for a late season application(s). Consult with your local Bayer CropScience Representative or Cotton Extension Specialist for guidance with exceptionally challenging situations.

ALLOW A MINIMUM OF 7 DAYS BETWEEN APPLICATIONS. DO NOT EXCEED 2.53 FL OZ PER ACRE PER YEAR. APPLICATIONS OF CYCLANILIDE 18% SC PLUS MEPIQUAT CHLORIDE CAN BE MADE UP TO 30 DAYS PRIOR TO HARVEST.

USE OF ADJUVANTS

Cyclanilide 18% SC is rain-safe in 4-8 hours. If rain is expected within 4 hours, use of a high quality EPA-exempt surfactant can reduce the rain- safe period to 2 hours.

MIXING INSTRUCTIONS

Cyclanilide 18% SC is a suspension concentrate (SC) formulation and must be applied with calibrated spray equipment. Cyclanilide 18% SC is formulated to mix readily in water. Prior to adding Cyclanilide 18% SC to the spray tank, ensure that the spray tank is thoroughly cleaned and free of other pesticides that may injure cotton. Cyclanilide 18% SC is compatible with most insecticides and miticides. Cyclanilide 18% SC can be tank mixed with foliar fertilizers if prior experience and/or test strips has proven to be compatible and non-injurious. Prior to preparing a tank mix always perform a compatibility test mix with all tank mix components. Mix the finished spray solution as follows:

1. Fill the spray tank 1/2 to 3/4 full with water.
2. Start agitation.
3. Add Cyclanilide 18% SC and continue agitation.
4. Add the appropriate amount of mepiquat chloride (see table above)
5. If mixing with a dry flowable/wettable powder tank mix partner, prepare a slurry of the proper amount of the product in a small amount of water. Add the slurry of dry materials to the spray tank.
6. If mixing with a liquid tank mix partner, add the liquid tank mix partner.
7. Complete filling the spray tank with water.
8. Maintain agitation during tank filling and spraying process.

Ensure that all spray system lines including pipes, booms, and screens have the correct concentration of the spray solution by flushing out the system lines before starting the crop application. Maintain agitation until the contents of the tank is sprayed. If the spray mixture is allowed to settle, thorough agitation is required to re-suspend the mixture before spraying is resumed. Screen size in nozzles or line strainers must be 50 mesh or larger.

FOR USE AS A COTTON HARVEST AID

USE INFORMATION

A foliar spray of Cyclanilide 18% SC in combination with ethephon will accelerate opening of mature cotton bolls, promote defoliation of both mature and juvenile foliage and reduce terminal regrowth. Treatments of Cyclanilide 18% SC in combination with ethephon can promote earlier harvest and enhances the potential for high quality, high yield, and an once-over harvest. Rainfall, stress, temperature fluctuations, residual nitrogen and yield potential can affect defoliation and/or regrowth.

SPRAY PREPARATION

Add 1/2 to 3/4 of the required amount of water to the spray tank. Start agitation. Add the required amount of Cyclanilide 18% SC, then the required amount of ethephon, and the remaining amount of water. Mix only as much spray solution as can be used on the day of application. Storage and use of previous day's spray mix may result in equipment corrosion and reduced activity.

Do not spill the concentrated product on spray equipment, or any airplane parts. ANY SPILLS SHOULD BE IMMEDIATELY RINSED WITH PLENTY OF WATER AS Cyclanilide 18% SC and ethephon, IS CORROSIVE. Use of a nurse tank is highly recommended for avoiding possible spills of concentrated formulation on spray equipment.

TANK MIXTURES WITH OTHER PRODUCTS

For Cotton Harvest

Cyclanilide 18% SC must be mixed with ethephon to be used as a Cotton Harvest Aid and may be applied as a tank mix or in sequential application with other harvest aid and insecticide products.

In some cases, crop conditions, such as rank growth, weed or insect infestations, drought, unutilized nitrogen, low temperature, high moisture, and heavy juvenile growth will require the inclusion of other products for satisfactory defoliation and terminal regrowth suppression. Cyclanilide 18% SC and ethephon can be tank mixed or sequentially applied with other products such as DEF® 6, FOLEX® 6EC, DROPP® 50WP, HARVADE® 5F, GINSTAR®, DROPP® ULTRA™, ROUNDUP®, METHYL PARATHION 4E or 4 lb, GUTHION® 2L or 3 and MALATHION™ 57EC for use on cotton in accordance with the most restrictive of the label limitations and precautions. No label dosage rates should be exceeded. Proper mixing sequences should be followed when making a tank mix. This product cannot be mixed with any product containing a label prohibition against such mixing. Follow all applicable use precautions and rate per acre recommendations on labels of products applied as tank mixtures or in sequence with Cyclanilide 18% SC and ethephon. In some cases, slight reduction in boll opening response has been observed when tank mixes with phosphate defoliant were used.

Cyclanilide 18% SC and ethephon tank mixes with DROPP® or DROPP® ULTRA™ on picker cotton and GINSTAR® on stripper cotton will enhance regrowth suppression and removal of juvenile foliage.

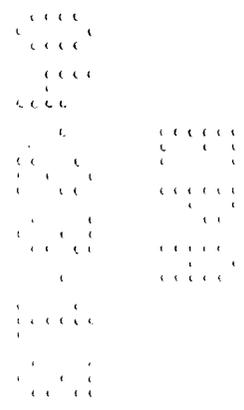
Under some conditions such as high temperatures or low soil moisture, tank mixtures with products such as FOLEX®, DEF®, DROPP® ULTRA™, GINSTAR® and METHYL PARATHION may result in leaf stick or leaf burn due to increased desiccation activity. To minimize leaf stick and leaf burn occurrence under these conditions, it is important to follow local recommendations and use the lower labeled rate of the tank mix partner product(s).

Good agitation in the spray tank is essential. A tank mixture should not be allowed to stand without agitation. Read and observe all appropriate label use directions and precautions for the defoliant used.

To improve mixing and coverage, it is recommended that Cyclanilide 18% SC and ethephon and tank mixtures Cyclanilide 18% SC and ethephon be mixed with adjuvants and/or compatibility agents which are cleared for application on cotton. Cyclanilide 18% SC and ethephon should be added to the tank after the addition of an adjuvant. Read and observe all appropriate label use directions and precautions for the adjuvant used.

NOTE: UNDER CERTAIN CONDITIONS, TANK MIXTURES OF CYCLANILIDE 18% SC AND ETHEPHON WITH DESICCANTS CONTAINING SODIUM CHLORATE COULD RESULT IN THE FORMATION OF A HYPOCHLOROUS ACID WHICH ON HEATING WILL EMIT TOXIC CHLORIDE FUMES.

DO NOT MIX CYCLANILIDE 18% SC AND ETHEPHON WITH AMMONIUM THIOSULFATE. SUCH TANK MIXTURES MAY RESULT IN FORMATION OF TOXIC FUMES.



WHEN TO APPLY

Apply Cyclanilide 18% SC and ethephon when the cotton crop has cut-out and there are sufficient mature unopened bolls present (40 to 60%) to produce the desired yield. This state of growth may be estimated when the crop has reached 2100 - 2400 DD 60's for the year.

Two additional methods should also be used to estimate the proper crop maturity for applications of Cyclanilide 18% SC and ethephon.

SHARP KNIFE TECHNIQUE

Apply when the number of mature unopened bolls is sufficient to produce the desired crop and bolls have become very hard, cannot be sliced easily by a sharp knife, have seed coats that are tan in color, and the seed kernel is completely filled inside the cavity. At this stage, no gelatinous material is present inside the boll or seed.

NODES ABOVE CRACKED BOLL

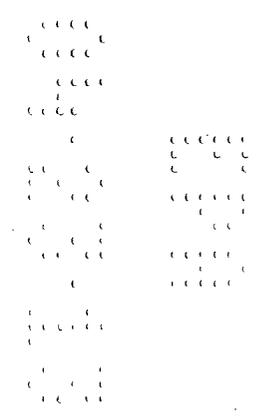
The crop is ready to treat when the top-most, first-position harvestable boll is 4 nodes above the uppermost, first-position cracked boll. Delaying treatment past this date is not likely to result in additional recoverable bolls at harvest.

USE PRECAUTION

Do not apply Cyclanilide 18% SC and ethephon if rain is expected within 6 hours. Rainfall within 6 hours of application may reduce product performance.

RESTRICTIONS

- Do not harvest cotton sooner than 7 days after a treatment with Cyclanilide 18% SC and ethephon.
- Do not apply this product through any kind of irrigation equipment.
- Do not plant any food crop within 30 days after last application. Small grains planted earlier than 1 month or intercropped within the cotton crop to which Cyclanilide 18% SC and ethephon will be applied may only be used as cover crops and may not be harvested for food or feed. Cyclanilide 18% SC and ethephon may cause yellowing and growth inhibition of treated small grains.
- In Arizona and California, any food crop can be planted 30 days after the last application. In the rest of the US, small grain or leafy vegetable crops can be planted only after 30 days, and all other food crops can be planted only after 4 months.
- Do not exceed a maximum of 2.0 lb ethephon active ingredient per acre per year through combined or repeated uses of any ethephon products.
- Do not exceed 0.25 lb cyclanilide active ingredient per acre per year.



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STORAGE AND DISPOSAL

Do not contaminate water, food or feed by storage, disposal or cleaning of equipment.

PESTICIDE STORAGE

Store in original container away from feed and food. Store in cool, dry area. Do not store in direct sunlight. Do not allow prolonged storage in temperatures that exceed 105°F (40°C) or in temperatures that fall below 14°F (-10°C).

PESTICIDE DISPOSAL

To avoid wastes, use all material in this container by application according to label directions. If wastes cannot be avoided, offer remaining product to a waste facility or pesticide disposal program (often such programs are run by state or local governments or by industry).

CONTAINER DISPOSAL

Rigid, Non-refillable containers (equal to or less than 5 gallons)

Non-refillable container. Do not reuse or refill this container. Offer for recycling, if available. Triple rinse or pressure rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container 1/4 full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times.

Pressure rinse as follows: Empty the remaining contents into application equipment or a mix tank and continue to drain for 10 seconds after the flow begins to drip. Hold container upside down over application equipment or mix tank or collect rinsate for later use or disposal. Insert pressure rinsing nozzle in the side of the container, and rinse at about 40 PSI for at least 30 seconds. Drain for 10 seconds after the flow begins to drip.

Once container is rinsed, offer for recycling if available or puncture and dispose of in a sanitary landfill.

Rigid Non-refillable containers (greater than 5 gallons or 50 lb)

Non-refillable Containers

Non-refillable containers - Do not reuse or refill this container. Refer to Bottom Discharge IBC or Top Discharge IBC, Drums, Kegs information as follows.

Bottom Discharge IBC (e.g. – Schuetz Caged IBC or Snyder Square Stackable)

Pressure rinsing the container before final disposal is the responsibility of the person disposing of the container. To pressure rinse the container before final disposal, empty the remaining contents from the IBC into application equipment or mix tank. Raise the bottom of the IBC by 1.5 inches on the side which is opposite of the bottom discharge valve to promote more complete product removal. Completely remove the top lid of the IBC. Use water pressurized to at least 40 PSI to rinse all interior portions. Continuously pump or drain rinsate into application equipment or rinsate collection system while pressure rinsing. Continue pressure rinsing for 2 minutes or until rinsate becomes clear. Replace the lid and close bottom valve.

Top Discharge IBC, Drums, Kegs (e.g.– Snyder 120 Next Gen, Bonar B120, Drums, Kegs).

Triple rinsing the container before final disposal is the responsibility of the person disposing of the container. To triple rinse the container before final disposal, empty the remaining contents from this container into application equipment or mix tank. Fill the container at least 10 percent full with water. Agitate vigorously or recirculate water with the pump for 2 minutes. Rinse all interior surfaces. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this procedure two more times.

Once container is rinsed, offer for recycling if available or puncture and dispose of in a sanitary landfill.

Refillable Containers

Refillable container – Refer to Bottom Discharge IBC or Top Discharge IBC, Drums, Kegs information as follows. Refill this container with pesticide only. Do not reuse this container for any other purpose. Contact your Ag retailer or Bayer CropScience for container return, disposal and recycling information.

Bottom Discharge IBC (e.g. – Schuetz Caged IBC or Snyder Square Stackable)

Pressure rinsing the container before final disposal is the responsibility of the person disposing of the container. Cleaning before refilling is the responsibility of the refiller. To pressure rinse the container before final disposal, empty the remaining contents from the IBC into application equipment or mix tank. Raise the bottom of the IBC by 1.5 inches on the side which is opposite of the bottom discharge valve to promote more complete product removal. Completely remove the top lid of the IBC. Use water pressurized to at least

40 PSI to rinse all interior portions. Continuously pump or drain rinsate into application equipment or rinsate collection system while pressure rinsing. Continue pressure rinsing for 2 minutes or until rinsate becomes clear. Replace the lid and close bottom valve.

Top Discharge IBC, Drums, Kegs (e.g.– Snyder 120 Next Gen, Bonar B120, Drums, Kegs).

Triple rinsing the container before final disposal is the responsibility of the person disposing of the container. Cleaning before refilling is the responsibility of the refiller. To triple rinse the containers before final disposal, empty the remaining contents from this container into application equipment or mix tank. Fill the container at least 10 percent full with water. Agitate vigorously or recirculate water with the pump for 2 minutes. Rinse all interior surfaces. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this procedure two more times.

Once container is rinsed, offer for recycling if available or puncture and dispose of in a sanitary landfill.

End users are authorized to remove tamper evident cables as required to remove the product from the container unless the container is equipped with one way valves and refilling or returning is planned. If this is the case, end users are not authorized to remove tamper evident cables, one way valves or clean container. See Container Disposal instructions under Storage Disposal.

